

~~firefighter's emergency operation for elevators shall only be controlled by elevator smoke detectors and shall not initiate upon other building fire detectors or evacuation signals.~~

~~**907.10.3 Door hold open functions.** Smoke detectors that are installed to hold open fire doors under nonemergency conditions and that are connected to a fire alarm system shall sound a general evacuation signal when the doors being held open are part of the means of egress corridor or stair system. Door hold open smoke detectors are not required to activate a visual or audible signal.~~

~~Subp. 32. **F Section 907.11.** IBC F Section 907.11 is deleted.~~

~~Subp. 33. **F Section 907.14.** IBC F Section 907.14 is deleted.~~

### **1305.0908 SECTION 908, EMERGENCY ALARM SYSTEMS.**

**IBC Sec. 908.7 is amended to read as follows:**

**908.7 Carbon monoxide alarms.** Group I or R occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be:

1. Listed as complying with UL 2034;
2. Be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions; and
3. Within 10 feet of each sleeping unit or sleeping room.

An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* shall not be considered an attached garage.

**Exception:** Sleeping units or dwelling units which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or attached garage, need not be equipped with a single-station carbon monoxide alarms provided that:

- ~~1. The sleeping unit or dwelling unit is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;~~
1. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage;
- and
2. The building is equipped with a common area carbon monoxide alarm system.

908.7.1 {unchanged}

### **1305.0909 SECTION 909, SMOKE CONTROL SYSTEMS.**

**Subpart 1. F Section 909.1 Scope and purpose** is amended to read as follows:

**909.1 Scope and purpose.** This section applies to mechanical or passive smoke control systems when they are required by other provisions of this code. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or

~~relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in suppression or overhaul activities, or the timely restoration of operations. Smoke control systems regulated by this section serve a different purpose than the smoke and heat venting provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the International Mechanical Code.~~

Subpart 2. F Section 909.4.6 Duration of operation is amended to read as follows:

909.4.6 Duration of operations. All portions of the active or passive smoke control system shall be capable of continued operation after detection of the fire event for a period of not less than either 20 minutes, or 1.5 times the calculated egress time, whichever is less. System design shall be for 20 minutes or 1.5 times the calculated egress time, whichever is less.

Subpart 1 2a. **F Section 909.4.** IBC F Section 909.4 is amended by adding a subsection to read as follows:

**909.4.7 Door opening force.** With any of the design methods allowed by Section 909, the door opening force, latch release, and set in motion force shall comply with Section 1008.1.2 3 requirements when the system is in smoke control mode.

Subp. 2. **F Section 909.21 22.** IBC F Section 909 is amended by adding a subsection to read as follows:

~~**909.22 High rise and Covered mall smoke exhaust systems.** High rise buildings and eCovered mall buildings exceeding 50,000 square feet (4645 m<sup>2</sup>) in floor area, excluding anchor stores, shall be equipped with a post fire smoke exhaust system installed and maintained in accordance with Section 913 916.~~

## **1305.0910 F SECTION 910, SMOKE AND HEAT VENTS.**

IBC F Section 910 is amended to read as follows:

### **F SECTION 910**

#### **SMOKE AND HEAT VENTS**

Subpart 1. **F Section 910.1.** IBC F Section 910.1 is amended by adding sections to read as follows:

**910.1.1 Required venting method.** Required smoke and heat venting shall be accomplished with mechanical smoke exhaust according to Section 910.4.

#### **Exceptions:**

1. Calculated engineering design of mechanical smoke exhaust in accordance with Section 910.5 shall be permitted for buildings sprinklered throughout.

2. For nonsprinklered buildings, smoke and heat vents as specified in Section 910.3 shall be permitted.

3. Where approved by the code official, smoke and heat vents as specified in Section 910.3 shall be permitted in sprinklered buildings.

**910.1.2 Listing.** Smoke and heat vents and mechanical smoke exhaust fans shall be listed for the intended purpose.

**910.1.3 Curtain boards.** When mechanical smoke exhaust is provided in accordance with Section 910.4 or 910.5, curtain boards are only required at the separation between areas protected with early suppression fast response (ESFR) sprinklers and conventional sprinkler systems.

Subp. 2. **F Section 910.4.** IBC F Section 910.4 is amended to read as follows:

**910.4 Mechanical smoke exhaust.** Mechanical smoke exhaust shall be in accordance with Sections 910.4.1 through 910.4.6.

Subp. 3. **F Section 910.4.3.** IBC F Section 910.4.3 is amended to read as follows:

**910.4.3 Operation.** Mechanical smoke exhaust fans shall be ~~automatically~~ manually activated, ~~upon sprinkler system water flow. A 5 to 10 minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans.~~ In addition, individual manual controls of each fan unit shall also be provided.

~~**Exception:** When required by the code official, initiation of mechanical smoke exhaust fans shall be only through manual activation.~~

Subp. 4. **F Section 910.4.5.** IBC F Section 910.4.5 is amended to read as follows:

**910.4.5 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum of 50 percent of the required exhaust. Air velocity at each supply air opening shall not exceed an average of 200 feet per minute when measured 4 feet (1219 mm) in front of the opening. Openings for supply air shall be uniformly distributed around the periphery of the area served and be located or ducted to a position not more than one-half the storage height above the floor. Supply air openings shall open automatically upon operation of the smoke exhaust system and shall not require a manual action at each supply opening for operation. Supply air openings shall be kept clear of storage or obstructions to airflow for at least four feet (1219 mm) in front of the opening. Supply air openings shall be separated from exhaust fans and exterior combustibles to prevent introduction of smoke into the building.

Subp. 5. **F Section 910.** IBC F Section 910 is amended by deleting section 910.5 and replacing it with the following: ~~adding sections to read as follows:~~

**910.5 Calculated engineering design of mechanical smoke exhaust.** Calculated engineering design of mechanical smoke exhaust shall be in accordance with Sections 910.5.1 through 910.5.5.

**910.5.1 Methodology.** Mechanical smoke exhaust systems shall be designed to remove smoke after a fire is extinguished and to assist the fire department during suppression operations or during marginal sprinkler control situations. They are not considered life safety systems and are not designed for occupant safety.

**910.5.2 Calculation method.** Volumetric flow rate calculations shall demonstrate that the system will provide at least three air changes per hour for the space required to be provided with smoke exhaust. When only a portion of a space is used for high piled storage requiring smoke exhaust, the volume to be extracted shall be based on the ceiling height multiplied by the actual gross floor area for storage.

**910.5.3 Operation.** Mechanical smoke exhaust fans shall be automatically activated upon sprinkler system water flow. A 5 to 10 minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans. In addition, individual manual controls of each fan unit shall also be provided.

**Exception:** When required by the code official, initiation of mechanical smoke exhaust fans shall be only through manual activation.

**910.5.4 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum of 50 percent of the required exhaust. Air velocity at each supply air opening shall not exceed an average of 200 feet per minute when measured 4 feet (1219 mm) in front of the opening. Openings for supply air shall be uniformly distributed around the periphery of the area served and be located or ducted to a position not more than one half the storage height above the floor. Supply air openings shall open automatically upon operation of the smoke exhaust system and shall not require a manual action at each supply opening for operation. Supply air openings shall be kept clear of storage or obstructions to airflow for at least 4 feet (1219 mm) in front of the opening. Supply air openings shall be separated from exhaust fans and exterior combustibles to prevent introduction of smoke into the building.

**910.5.5 Equipment.** Wiring and controls shall be as required in Section 910.4.4. Interlocks shall be as required in Section 910.4.6. Exhaust fans shall be uniformly spaced and each fan shall have a maximum individual capacity of 30,000 cfm (850 m<sup>3</sup>/min).

**910.6 Testing and maintenance.** Mechanical smoke exhaust systems shall be tested and maintained as required by Sections 910.6.1 through 910.6.4.

**910.6.1 Acceptance testing.** Mechanical smoke exhaust systems shall be acceptance tested as required by Sections 909.18.2 1 through 909.18.5 7 and 909.19.

**910.6.1.1 Controls.** For testing purposes, each smoke exhaust system equipped for automatic activation shall be put into operation by the actuation of the automatic initiating device. Control sequences shall be verified throughout the system, including verification of override from the firefighter's control panel when systems are equipped for automatic activation.

**910.6.2 Special inspections.** Special inspections for mechanical smoke exhaust shall be conducted according to Section 909.18.8.

**910.6.3 Maintenance.** Mechanical smoke exhaust systems, including exhaust fans, supply air openings and controls, shall be maintained and unobstructed.

**910.6.4 Operational testing.** Operational testing of the smoke exhaust system shall include all equipment such as initiating devices, fans, dampers, controls, and supply air openings. Mechanical smoke exhaust systems shall be operated and tested under each control sequence at least annually.

## **1305.0912 F SECTION 912, FIRE DEPARTMENT CONNECTIONS.**

IBC F Section 912.2 is amended by adding a subsection to read:

**912.2.3 Connection height.** Newly installed fire department connections shall be located not less than 18 inches (457 mm) and not more than 4 feet (1.2 m) above the level of the adjacent grade or access level.

## **1305.0916 SECTION 916, POST FIRE EXHAUST SYSTEM.**

IBC Chapter 9 is amended by adding a section and subsections to read as follows:

### **SECTION 916**

#### **POST FIRE SMOKE EXHAUST SYSTEM**

**916.1 Scope and purpose.** This section applies to post fire smoke exhaust systems when they are required by other provisions of this code. The purpose of this section is to establish minimum requirements for the design and installation of smoke exhaust systems that are intended for the timely restoration of operations and overhaul activities once a fire is extinguished.

**916.2 General design requirements.** Post fire smoke exhaust systems are not intended or designed as life safety systems and are not required to meet the provisions of Section 909. These systems are permitted to use dedicated equipment, the normal building HVAC system or other openings and shall have the capability to exhaust smoke from occupied spaces. Smoke removal may be by either mechanical or natural ventilation, but shall be capable of removing cold smoke. Smoke exhaust shall be permitted through elevator shafts. Smoke removed from a space must be discharged to a safe location outside the building and may not be recirculated into the building in accordance with the mechanical code.

**916.3 Exhaust capability.** The system shall have an air supply and smoke exhaust capability that will provide a minimum of three air changes per hour or remove smoke to less than a 5 percent concentration within one hour of operation. The system need not exhaust from all areas at the same time, but is permitted to be zoned based on the largest fire area served. For the purpose of calculating system size, the height of a compartment shall be considered to run from slab to slab and include the volume above suspended ceilings.

**916.4 Operation.** The smoke exhaust system shall be operated by manual controls that are readily accessible to the fire department at an approved location and shall incorporate an approved control diagram. When a system is zoned into areas of operation less than the entire building, each zone shall have an individual control. Fire department manual controls of post fire smoke exhaust systems shall have the highest priority of any control point within the building. Smoke exhaust shall not be permitted through any exit enclosure as defined in Section 1002.

**916.5 Inspection and testing.** Post fire smoke exhaust systems shall be inspected and tested annually.

**1305.1000 [Repealed, 19 SR 1340]**

**1305.1000 [Repealed, 27 SR 1474]**

**1305.1003 [Repealed, 31 SR 1165]**

**1305.1004 [Repealed, 31 SR 1165]**

**1305.1008 SECTION 1008, DOORS, GATES, AND TURNSTILES.**

Subpart 1. **Repealed, 31 SR 1165**

Subp. 2. **Repealed, 31 SR 1165**

Subp. 3. **Repealed, 31 SR 1165**

Subp. 4. **IBC Section 1008.1.3.** IBC Section 1008.1.3 is amended by adding a subsection to read as follows:

**1008.1.3.6 Special egress control devices.** ~~Where the clinical needs of the patients require specialized security measures for their safety, door locking arrangements are permitted in Group I-1 occupancies (this includes use groups as described in Group I-1 occupancies that are identified as either Group R-3 or Group R-4 occupancies because of occupant load) and Group I-2 occupancies provided that:~~

- ~~1. keys or devices that function like keys are carried by staff at all times;~~
- ~~2. in at least one egress path, not more than one such arrangement is located;~~
- ~~3. the building or fire area is protected by an approved automatic sprinkler system in accordance with Section 903.3.1.1 (NFPA 13) and an approved fire alarm system having smoke detection, installed throughout the exit corridor system and areas open to the exit corridor;~~
- ~~4. locking devices automatically unlock upon activation of any of the following:~~
  - ~~a. automatic sprinkler system;~~

- ~~b. automatic smoke detection system;~~
- ~~c. automatic fire alarm system; or~~
- ~~d. loss of electrical power;~~
- ~~5. locking devices can be remotely unlocked from an approved location within the secured area;~~
- ~~6. there is no public assembly space within the secured area;~~
- ~~7. 24-hour patient supervision is provided within the secured area;~~
- ~~8. relocking of the locking device is by manual means from an approved location within the secured area;~~
- ~~9. locking devices are designed to fail in the open position;~~
- ~~10. special egress control devices are not permitted in buildings of type III B or V B construction, and shall not exceed one story in height when in type III A, IV HT, or type V A construction;~~
- ~~11. floor levels within the building or portion of the building with the special egress control devices shall be divided into at least two compartments by smoke barriers meeting the requirements of Section 709; and~~
- ~~12. substitution of the automatic sprinkler system for one-hour fire-resistance-rated construction (pursuant to Table 601, footnote d) is permitted.~~

Subp. 5. **IBC Section 1008.1.5.** IBC Section 1008.1.5 is amended by modifying exception 5 to read as follows:

**Exceptions:**

- 5. Exterior decks, patios, or balconies that are part of Type B dwelling units, have impervious surfaces, and that are not more than two inches (50 mm) below the finished floor level of the adjacent interior space of the dwelling unit.

Subp. 6. **IBC Section 1008.1.9.3.** IBC Section 1008.1.9.3 is amended to read as follows:

**1008.1.9.3 Locks and latches.** Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

- 1. Places of detention or restraint.
- 2. In buildings in occupancy Group A having an occupant load of 300 or less, in buildings in occupancy Groups B, F, M, and S, and in churches, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

- 2.1. The locking device is readily distinguishable as locked.
- 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
- 2.3. The use of the key operated locking device is revocable by the building official for due cause.
3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface mounted hardware.
4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
6. Delayed egress locks, installed and maintained in conformance with Section 1008.1.9.7.
7. Special locking arrangements installed and maintained in conformance with Section 1008.1.9.6.
8. In rooms, other than cells, where occupants are being restrained for safety or security reasons, special detention arrangements which comply with the requirements of Section 1008.1.11 are permitted.

Subp. 7. **IBC Section 1008.1.9.7.** IBC Section 1008.1.9.7 is amended to read as follows:

**1008.1.9.7 Delayed egress locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.



4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for one second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

**Exception:** Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 30 SECONDS.

6. Emergency lighting shall be provided at the door.

**Subp. 7A IBC Section 1008.1.9.6** IBC Section 1008.1.9.6 is amended to read as follows:

1008.1.9.6 Special locking arrangements in Group I-1, I-2, R-3 or R-4. Approved special egress locks shall be permitted in a Group I-1, I-2, R-3 or R-4 occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 ~~or~~ and an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that doors are installed and operated in accordance with Items 1 through 7.

1. The doors unlock upon actuation of the automatic sprinkler system ~~or~~ and automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.

4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.

5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.

6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.

7. Emergency lighting shall be provided at the door.

8. 24-hour patient supervision is provided within the secured area.

9. Locking devices are designed to fail in the open position.

10. Floor levels within the building or portion of the building with special locking arrangement shall be divided into at least two compartments by smoke barriers meeting the requirements of Section 709.

Exception: Item 1 through 4 shall not apply to doors to areas where persons, which because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.

**Subp. 8. IBC Section 1008.1.** IBC Section 1008.1 is amended by adding subsections as follows:

**1008.1.11 Special detention arrangements.** Special detention arrangements meeting the requirements of Sections 1008.1.11 through 1008.1.11.4 are permitted for rooms, other than cells, where the occupants are being restrained for safety or security reasons. The use of Sections 1008.1.11 through 1008.1.11.5 may be revoked by the fire code official or building official for due cause.

**1008.1.11.1 Locking hardware.** Locking devices shall release upon any of the following conditions:

1. Activation of the automatic sprinkler system.
2. Activation of any automatic fire detection device.
3. Activation of any automatic fire alarm system.
4. Loss of electrical power to the locking device or the fire alarm system.
5. Activation of the fire alarm trouble signal.
6. Operation of a manual switch located in an approved location.

All locking devices shall be designed to fail in the open position following the release of the locking devices for any of the conditions specified above. Relocking of the devices shall be by manual means only at the door.

**1008.1.11.2 Fire extinguishing system.** When special detention arrangements are used, the room or area being secured shall be protected with quick response sprinklers.

**1008.1.11.3 Fire alarm and detection.** When special detention arrangements are used, the room or area and spaces between the room or area and an exterior exit door shall be protected with automatic smoke detection connected to the building's fire alarm system. If the walls of the room or area do not extend to the ceiling, automatic smoke detection can be provided in the adjacent room or area, provided that there are no substantial obstructions to delay activation of the smoke detection.

**1008.1.11.4 Location.** The room or rooms shall be located on a floor that provides direct grade level access when located in buildings or portions thereof consisting of nonrated construction.

## **1305.1009 SECTION 1009, STAIRWAYS AND HANDRAILS.**

**IBC Section 1009.13** IBC Section 1009.13 is amended to read as follows:

**1009.13 Alternating tread devices.** Alternating tread devices are limited to an element of a means of egress in buildings of Groups F, H, and S from a mezzanine not more than 250 square feet (23 m<sup>2</sup>) in area and which serves not more than five occupants; in buildings of Group I 3 from a guard tower, observation station, or control room not more than 250 square feet (23 m<sup>2</sup>) in area and for access to unoccupied roofs. Access to mechanical equipment or appliances on a roof shall be in accordance with Section 1209.3.1 and the Minnesota Mechanical Code.

**IBC Section 1009.14 Ships Ladder** is amended to read as follows:

**IBC Section 1009.14 Ships Ladders.** Ships ladders constructed in accordance with MSBC 1305.1209 shall be permitted to be used as a means of egress component at the following locations:

1. Ships ladders are permitted to be used in Group I-3 occupancies for as a component of a means of egress to and from at control rooms or elevated facility observation stations not more than 250 square feet (23 m<sup>2</sup>) in floor area, with not more than three occupants and for access to unoccupied roofs.
2. Ships ladders are permitted to be used as a component for means of egress at recessed or elevated floors or platforms when the area served has an occupant load of five or less, and the space meets all of the following criteria:
  - a) Access to the area served is limited to building facilities staff, maintenance staff, employees, or other authorized personnel;
  - b) required access to the area served is limited and periodic;
  - c) the area served is used for building maintenance service functions, or for equipment access or monitoring;
  - d) the area served is not required to have a second means of egress by other provisions of this code; and,
  - e) the area served is not classified as a Group H occupancy.
3. Ships ladders are permitted to be used for access to unoccupied spaces in accordance with MSBC 1305.1209.

~~Ships ladders shall have a minimum tread depth of 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is no less than 8-1/2 inches (216 mm). The maximum riser height shall be 9-1/2 inches (241 mm). Handrails shall be provided on both sides of ships ladders. The minimum clear width at and below the handrails shall be 20 inches (508 mm).~~

### **1305.1013 SECTION 1013, GUARDS.**

Subpart 1. **IBC Section 1013.2** IBC Section 1013.2 is amended by adding an exception as follows:

**Exception:**

8. In accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B112, guards are not required on bleachers 55 inches or less in height.

Subp. 2. **IBC Section 1013.3** IBC Section 1013.3 is amended by modifying exception 4 to read as follows:

2. The guard height in assembly seating areas shall be in accordance with Section 1028.14 and the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112

Subp. 3. IBC Section 1013.8 Window sills is amended to read as follows:

1013.8 Window sills. In Occupancy groups R-2, and R-3, one- and two- family, and multiple-family dwellings, and townhouses, where the lowest part of the opening of the sill portion of an operable window is located more than 72 inches (1829 mm) above the finished grade or other surface below, the lowest part of the clear opening of the window opening shall be at a height not less than 36 inches (915 mm) above the finished floor surface of the room in which the window is located. ~~Ø~~ Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 36 24 inches (915 610 mm) of the finished floor.

Exceptions:

1. Operable windows where the lowest part sill portion of the opening is located more than 75 feet (22,860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.
2. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
3. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.
4. Windows that are provided with window opening control devices that comply with Section 1013.8.1.
5. Replacement windows for occupancy groups R-2, R-3, one-and two-family, multi-family dwellings, and townhouses located on or below the third story above grade plane are exempt from Section 1013.8.

1013.8.1 Window opening control devices. Window opening control devices shall comply with ASTM F 2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1029.2.

**1305.1017 SECTION 1017, AISLES.**

IBC Section 1017 and all subsections are deleted in their entirety and replaced with the following:

**1017.1 Aisles and aisle accessways.** Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles and aisle accessways shall be provided from all occupied portions of the exit access. Aisles and aisle accessways serving assembly areas, other than seating at tables, shall comply with Section 1028. Aisles and aisle accessways serving reviewing stands, grandstands, and bleachers shall comply with Section 1028.

**1017.2 Width determination.** Where tables or counters are served by fixed seats, the width of the aisle or aisle accessway shall be measured from the back of the seat. Where seating is located at a table or counter and is adjacent to an aisle or aisle accessway, the measurement of required clear width of the aisle or aisle accessway shall be made to a line 19 inches (483 mm) measured perpendicular to and away from and running parallel to the edge of the table or

counter. In the case of other side boundaries for aisle or aisle accessways, the clear width shall be measured to walls, tread edges, or other obstructions.

The required width of the aisles and aisle accessways shall be unobstructed.

**Exception:** Doors, when fully opened, and handrails shall not reduce the required width by more than 7 inches (178 mm). Doors in any position shall not reduce the required width by more than one half. Other nonstructural projections such as trim and similar decorative features are permitted to project into the required width 1.5 inches (38 mm) from each side.

**1017.2.1 Minimum aisle accessway width.** Aisle accessways not required to be accessible by Chapter 11 shall provide a minimum of 12 inches (305 mm) of width, plus 0.5 inches (12.7 mm) of width for each additional one foot (305 mm), or fraction thereof, beyond 12 feet (3658 mm) of aisle accessway length.

**Exception:** Portions of an aisle accessway having a length not exceeding six feet and used by a total of not more than four persons.

**1017.2.2 Minimum aisle width.** The minimum clear width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than 36 inches (914 mm).

**Exception:** Nonpublic aisles serving less than 50 people, and are not required to be accessible by Chapter 11, need not exceed 28 inches (711 mm) in width.

### **1017.3. Length.**

**1017.3.1 Aisle accessway.** The length of travel along the aisle accessway shall not exceed 30 feet (9144 mm) to an aisle or exit access doorway.

**1017.3.2 Aisle.** The length of travel along an aisle or combination aisle accessway and aisle to a point where a person has a choice of two or more paths of egress travel to separate exits or exit access doorways shall not exceed that permitted by Section 1014.3 for common path of egress travel.

## **1305.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.**

IBC Section 1015.1 is amended to read as follows:

**1015.1 Exit or exit access doorways required from spaces.** Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds the values in Table 1015.1.

**Exception:**

1. In Groups R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

2. Care suites in Group I-2 occupancies complying with Section 407.4.3.
2. The common path of egress travel exceeds the limitations of Section 1014.3.
3. Where required by Sections 1015.3, 1015.4, 1015.5, and 1015.6
4. When located in buildings used for educational purposes, laboratories and prep rooms that exceed 500 square feet in area and contain hazardous materials.

Where a building contains mixed occupancies, each individual occupancy shall comply with the applicable requirements for that occupancy. Where applicable, cumulative occupant loads from adjacent occupancies shall be considered in accordance with the provisions of Section 1004.1

Table 1015.1 is unchanged.

### **1305.1018 SECTION 1018 CORRIDORS**

**1305.1018.6, IBC Section 1018.6 Corridor Continuity, is amended to read as follows:**

**IBC Section 1018.6 Corridor continuity.** Fire-resistance-rated *corridors* shall be continuous from the point of entry to an *exit*, and shall not be interrupted by intervening rooms. When the path of egress travel within a fire-resistance-rated *corridor* to the exit includes travel along unenclosed *exit access stairways* or *ramps*, the fire resistance-rating shall be continuous for the length of the *stairway* or *ramp* and for the length of the connecting *corridor* on the adjacent floors leading to the exit.

Exceptions: 1. Foyers, lobbies or reception rooms constructed as required for *corridors* shall not be construed as intervening rooms so long as the aggregate area of such spaces does not exceed 1000 sq.ft. per floor.

2. Spaces constructed as required for *corridors* shall be permitted to be open to a *corridor*, only where all the following criteria are met:

a. The spaces are not occupied as a *dwelling units, sleeping units*, incidental use or hazardous uses.

b. The open space and *corridor* is protected by an *automatic smoke detection system* that initiates alarm notification devices in all normally occupied spaces that utilize the *corridor* for their *means of egress*.

c. The space is arranged so as not to obstruct access to the required *exits*.

d.\* The space is not within a nonsprinklered group R occupancy.

### **1305.1022 SECTION 1022, INTERIOR EXIT STAIRWAYS AND RAMPS**

**1305.1022.5, IBC Section 1022.5 Penetrations, is amended to read as follows:**

**1022.5 Penetrations.** Penetrations into and openings through *interior exit stairways* and *ramps* are prohibited except for required *exit* doors, equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communications systems and electrical raceway serving the *interior exit stairway* or *ramp* and

terminating at a steel box not exceeding 16 square inches (0.010m<sup>2</sup>). Such penetrations shall be protected in accordance with Section 714. There shall be no penetrations or communicating openings, whether protected or not, between adjacent *interior exit stairways* and *ramps*.

~~**Exception:** Membrane penetrations shall be permitted on the outside of the *interior exit stairway* and *ramp*. Such penetrations shall be protected in accordance with Section 714.3.2.~~

### **1305.1023 SECTION 1023 EXIT PASSAGEWAYS**

**1305.1023.6, IBC Section 1023.6 Penetrations, is amended to read as follows:**

#### **1023.6 Penetrations.**

Penetrations into and openings through an *exit passageway* are prohibited except for required *exit* doors, equipment and ductwork necessary for independent pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication and electrical raceway serving the *exit passageway* and terminating at a steel box not exceeding 16 square inches (0.010m<sup>2</sup>). Such penetrations shall be protected in accordance with Section 714. There shall be no penetrations or communicating openings, whether protected or not, between adjacent *exit passageways*.

~~**Exception:** Membrane penetrations shall be permitted on the outside of the *exit passageway*. Such penetrations shall be protected in accordance with Section 714.3.2.~~

### **1305.1028 SECTION 1028, ASSEMBLY.**

**IBC Section 1028.1.1.** IBC Section 1028.1.1 is amended to read as follows:

1028.1.1 Bleachers, grandstands, and folding and telescopic seating, that are not building elements, shall comply with International Code Council (ICC) 300, with the following amendments to ICC 300:

a. ICC 300 Section 404.5 is amended by adding an exception as follows:

**Exception:** Aisles shall not be required to be more than 66 inches (1.676 mm) in width when the following are satisfied:

1. the seating area served by such aisles is composed entirely of bleachers;
2. the row to row dimension is 28 inches (71 cm) or less; and
3. front egress is not limited.

b. ICC 300 Section 405.1 is amended to read as follows:

**Section 405.1 Aisles.** The minimum width of aisles shall be in accordance with Section 404.5, but not less than that required by this section. An aisle is not required in seating facilities where all of the following conditions exist:

1. Seats are without backrest.

2. The rise from row to row does not exceed 6 inches (152 mm) per row.

**Exception:** Bleachers 55 inches or less in height.

3. The row to row spacing does not exceed 28 inches (711 mm) unless the seat boards and footboards are at the same elevation.
4. The number of rows does not exceed 16 rows in height.
5. The first seat board is not more than 12 inches (305 mm) above the ground floor or a cross aisle.

**Exception:** Bleachers 55 inches or less in height.

6. Seat boards have a continuous flat surface.
7. Seat boards provide a walking surface with a minimum width of 11 inches (279 mm).
8. Egress from seating is not restricted by rails, guards, or other obstructions.
- c. ICC 300 Section 405.6 is amended by adding an exception as follows:

3. Aisles serving bleachers in compliance with Section 404.5.

- d. ICC 300 Section 408.1, item 1 is amended by adding a second exception as follows:

(First exception is numbered as 1.)

2. In accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112:

- (a) bleachers must have vertical perimeter guards or other approved guards that address climbability and are designed to prevent accidents; and
- (b) guards are not required on bleachers 55 inches (1397 mm) and less in height.

- e. ICC 300 Section 408.3 is amended to read as follows:

**408.3 Guard design.** Guards and their attachment shall be designed to resist the loads indicated in Section 303. Bleachers must have vertical perimeter guards or other approved guards that address climbability and are designed to prevent accidents, in accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112.

- f. ICC 300 Chapter 5 is deleted and replaced with the following:

All bleachers or bleacher open spaces over 55 inches (1397 mm) above grade or the floor below, and all bleacher guardrails, if any part of the guardrail is over 30 inches (762 mm) above grade or the floor below, must be certified to conform with the safety requirements contained in Minnesota Statutes, section 326B.112.



## **1305.1029 SECTION 1029 EMERGENCY ESCAPE AND RESCUE**

IBC Section 1029 is amended by adding the following subsection to read as follows:

**1305.1029.6 Replacement windows.** Replacement windows shall be exempt from the minimum size and maximum height requirements of Sections 1029.2, 1029.2.1, and 1029.3 if the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window;
2. Building uses that are required to be licensed or registered by the State of Minnesota shall have emergency escape and rescue replacement windows installed to comply with the requirements of the agency that licenses or registers the use, or the provisions of part 1305.1029.6, whichever is more restrictive.

## **1305.1101 SECTION 1101, GENERAL.**

IBC Section 1101.1 is amended to read as follows:

**1101.1 General.** Buildings or portions of buildings shall be accessible to persons with disabilities as required by Minnesota Rules, chapter 1341. Refer to Minnesota Rules, chapter 1341, the Minnesota Accessibility Code, for the complete application of IBC Chapter 11.

**1305.1200 [Repealed, 19 SR 1340]**

**1305.1202 [Repealed, 31 SR 1165]**

## **1305.1203 SECTION 1203, VENTILATION.**

IBC Section 1203.1 is amended to read as follows:

**1203.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1203.4 or mechanical ventilation in accordance with Minnesota Rules, chapter 1346.

### **Exceptions:**

1. Buildings or portions thereof that are not intended for normal human occupancy, or where the primary purpose is not associated with human comfort.
2. Group U occupancies.

Where the air infiltration rate in a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section

402.4.1.2 of the International Energy Conservation Code, the dwelling unit shall be ventilated by mechanical means in accordance with Minnesota Rules, chapter 1346.

**1305.1204 [Repealed, 31 SR 1165]**

**1305.1207 [Repealed, 31 SR 1165]**

**1305.1209 SECTION 1209, ACCESS TO UNOCCUPIED SPACES.**

IBC Section 1209.3 is amended, and subsections added, to read as follows:

**1209.3 Mechanical equipment and appliance access.** Access to mechanical equipment and appliances installed in underfloor areas, in attic spaces, and on roofs or elevated structures shall be in accordance with this section and the Minnesota Mechanical Code.

**1209.3.1 Mechanical equipment and appliances on roofs or elevated structures.** Where mechanical equipment or appliances requiring periodic inspection, service, or maintenance are installed on roofs or elevated structures, a permanent stair shall be provided for access.

**Exception:** A portable ladder may be used for dwellings, replacement equipment on existing buildings, and exterior roof access points not exceeding 16 feet (4.9 m) above grade, unless the building official determines that the unique shape of the roof does not allow safe access with a portable ladder.

The permanent stair shall be as required by relevant safety regulations, but shall not be less than the following:

1. The stair shall be installed at an angle of not more than 60 degrees measured from the horizontal plane.
2. The stair shall have flat treads at least six inches (152 mm) deep and a clear width of at least 18 inches (457 mm) with equally spaced risers at least 10.5 inches (267 mm) high and not exceeding 14 inches (356 mm).
3. The stair shall have intermediate landings not exceeding 18 feet (5.5 m) vertically.
4. Continuous handrails shall be installed on both sides of the stair.
5. Interior stairs shall terminate at the underside of the roof at a hatch or scuttle of at least eight square feet ( $0.74\text{m}^2$ ) with a minimum dimension of 20 inches (508 mm).
6. When a roof access hatch or scuttle is located within ten feet (3.0 m) of a roof edge, a guard shall be installed in accordance with this code.
7. Exterior stairs shall terminate at the roof access point or at a level landing of at least eight square feet ( $0.74\text{m}^2$ ) with a minimum dimension of 20 inches (508 mm). The landing shall have a guard installed in accordance with IMC Section 304.9.

**1209.3.1.1 Permanent ladders.** Where a change in roof elevation greater than 30 inches (762 mm) but not exceeding 16 feet (4.9 m) exists, a permanent ladder shall be provided. The ladder may be vertical and shall be as required by relevant safety regulations, but shall not be less than the following:

1. Width shall be at least 16 inches (406 mm).
2. Rung spacing shall be a maximum of 14 inches (356 mm).
3. Toe space shall be at least six inches (152 mm).
4. Side railings shall extend at least 30 inches (762 mm) above the roof or parapet wall.

### **1305.1210 SECTION 1210, SURROUNDING MATERIALS.**

IBC Section 1210.1 is amended to read as follows:

**1210.2.1 Floors and wall bases.** In other than dwelling units, toilet, bathing and shower room floor finish material shall have a smooth, hard, nonabsorbent surface, such as portland cement, concrete, ceramic tile, sheet vinyl, or other approved floor covering material. The intersections of such floors with walls shall have a smooth hard nonabsorbent vertical base that extends upward onto the walls at least 4 inches (7 mm).

**1305.1300 [Repealed, 19 SR 1340]**

**1305.1350 [Repealed, 19 SR 1340]**

**1305.1355 [Repealed, 11 SR 1405]**

**1305.1370 [Repealed, 19 SR 1340]**

**1305.1400 [Repealed, 19 SR 1340]**

### **1305.1403 PERFORMANCE REQUIREMENTS.**

**1305.1403.5. Section 1403.5 Vertical and Lateral Flame Propagation,** is deleted entirely.

~~**1403.5 Vertical and Lateral Flame Propagation.** Exterior walls on buildings of Type I, II, III or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and contain a combustible water-resistive barrier shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.~~

**1305.1404 [Repealed, 31 SR 1165]**

### **1305.1405 SECTION 1405, INSTALLATION OF WALL COVERINGS.**

Subpart 1. **Section 1405.4.2.** IBC Section 1405.4.2 is amended to read as follows:

**1405.4.2 Masonry.** Flashing and weepholes in anchored veneer shall be located above finished ground level above the foundation wall or slab, and other points of support, including structural floors, shelf angles and lintels where anchored veneers are designed in accordance with Section .  
1405.4.6

Subp. 2. **Repealed, 31 SR 1165**

**1305.1500 [Repealed, 19 SR 1340]**

### **1305.1503 SECTION 1503, WEATHER PROTECTION.**

Subpart 1. **IBC Section 1503.4.** IBC Section 1503.4 is amended to read as follows:

**1503.4 Roof drainage.** Design and installation of roof drainage systems shall comply with Minnesota Rules, chapter 4715, Minnesota Plumbing Code, and the following provisions:

- 1. Where required.** All roofs shall drain into a separate storm sewer system or to an approved place of disposal. For one and two family dwellings, and where approved, storm water is permitted to discharge onto flat areas, such as streets or lawns, provided that the storm water flows away from the building.
- 2. Roof design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges, or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.
- 3. Secondary drainage required.** Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.
- 4. Separate systems required.** Secondary (emergency) roof drain systems shall have piping and point of discharge separate from the primary system. Discharge shall be above grade in a location which would normally be observed by the building occupants or maintenance personnel.
- 5. Sizing of secondary drains.** Secondary (emergency) roof drain systems shall be sized in accordance with the Minnesota State Plumbing Code. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by this code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drainage system.

Subp. 2. **IBC Section 1503.4.1.** IBC Section 1503.4.1 is deleted in its entirety.

**1305.1506 [Repealed, 27 SR 1474]**

### **1305.1507 SECTION 1507, REQUIREMENTS FOR ROOF COVERINGS.**

Subpart 1. **Repealed, 31 SR 1165**

Subp. 2. **Repealed, 31 SR 1165**

Subp. 3. **Repealed, 31 SR 1165**

Subp. 4. **Repealed, 31 SR 1165**

Subp. 5. **Section 1507.10.1.** IBC Section 1507.10.1 is amended to read as follows:

**1507.10.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, built-up roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage, except for coal-tar built-up roofs that shall have a design slope of a minimum one-eighth unit vertical in 12 units horizontal (1-percent slope).

Subp. 6. **Section 1507.11.1.** IBC Section 1507.11.1 is amended to read as follows:

**1507.11.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, modified bitumen membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 7. **Section 1507.12.1.** IBC Section 1507.12.1 is amended to read as follows:

**1507.12.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, thermoset single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 8. **Section 1507.13.1.** IBC Section 1507.13.1 is amended to read as follows:

**1507.13.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, thermoplastic single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 9. **Section 1507.14.1.** IBC Section 1507.14.1 is amended to read as follows:

**1507.14.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, sprayed polyurethane foam roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 10. **Section 1507.15.1.** IBC Section 1507.15.1 is amended to read as follows:

**1507.15.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, liquid-applied roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope).

### **1305.1509 SECTION 1509, ROOFTOP STRUCTURES.**

IBC Section 1509.2.3 is amended to read as follows:

**1509.2.3 Use limitations.** Penthouse shall not be used for purposes other than shelter of mechanical or electrical equipment, tanks, or vertical shaft openings in the roof assembly.

**Exception:** Accessory uses necessary for the maintenance of building systems shall be permitted when the penthouse is sprinkled in accordance with section 903.1.1.

## **1305.1510 SECTION 1510, REROOFING.**

IBC Section 1510.5 is amended to read as follows:

**1510.5 Reinstallation of materials.** Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edging, drain outlets, collars and metal counterflashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled unless such aggregate complies with the gradation requirements of ASTM C-33 Standard Specification for Concrete Aggregate.

**1305.1590 [Repealed, 19 SR 1340]**

**1305.1600 [Repealed, 19 SR 1340]**

**1305.1604 [Repealed, 31 SR1165]**

## **1305.1607 SECTION 1607, LIVE LOADS.**

Subpart 1. **Repealed, 31 SR 1165**

Subp. 2. **Section 1607.1342.2.** IBC Section 1607.1342.2 is amended to read as follows:

**1607.1342.2 Vertical impact force.** The maximum wheel loads of the crane shall be increased by the percentages shown below to determine the induced vertical impact or vibration force. Impact load shall be applied to one hoist system at a time for multiple hoist or bridge systems.

Monorails, underhung bridge cranes and pendant operated top running bridge cranes:

15 percent minimum for hoist lift speeds of less than 30 feet per minute.

Percentage equivalent to 0.5 times the hoist lift speed, for lift speeds of 30 to 100 feet per minute.

50 percent maximum for hoist lift speeds greater than 100 feet per minute.

50 percent for magnetic pickup or vacuum lift type systems.

No impact load is required for hand chain (non-powered) hoists.

Cab operated or remotely operated top running bridge cranes:

25 percent minimum.

Subp. 3. **Section 1607.1312.3.** IBC Section 1607.1312.3 is amended to read as follows:

**1607.1312.3 Lateral force.**

Top running powered bridge cranes. The lateral force on top running crane runway beams with powered trolleys shall be calculated as 20 percent of the sum of the rated capacity of the crane and the weight of the hoist and trolley. The lateral force shall be assumed to act horizontally at the traction surface of a runway beam, in either direction perpendicular to the beam, and shall be distributed according to the lateral stiffness of the runway beam and supporting structure. The runway beams shall be designed for the lateral and torsional loads, as well as for the maximum lateral deflection limit of  $\text{Span}/800$ .

Monorails and underhung bridge cranes.

The bridge girder, underhung bridge crane runway beam and monorails shall be designed with sufficient strength and rigidity to prevent detrimental lateral deflection.

The lateral deflection should not exceed  $\text{span}/800$  based on 5 percent of maximum wheel load(s) without vertical impact factor.

**1305.1608 SECTION 1608, SNOW LOADS.**

Subpart 1. **Section 1608.2.** IBC Section 1608.2 is amended to read as follows:

**1608.2 Ground snow loads.** The ground snow loads to be used in determining the design snow loads for buildings and other structures are given in Minnesota Rules, chapter 1303.

Subp. 2. **Figure 1608.2.** IBC Figure 1608.2 on GROUND SNOW LOADS, pg, FOR THE UNITED STATES (PSF) is deleted.

Subp. 3. **Repealed, 31 SR 1165**

**1305.1614 [Renumbered 1305.1616]**

**1305.1616 [Renumbered 1305.1618]**

**1305.1616 [Repealed, 27 SR 1474]**

**1305.1618 [Repealed, 27 SR 1474]**

**1305.1623 [Renumbered 1305.1625]**

**1305.1625 [Repealed, 27 SR 1474]**

1305.1700 [Repealed, 19 SR 1340]

1305.1701 [Repealed, 27 SR 1474]

1305.1702 [Repealed, ]SECTION 1702, DEFINITIONS.

The definition of "approved agency" in IBC Section 1702.1 is amended to read as follows:

~~APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved. The structural engineer of record, that engineer's employee or that engineer's agent may conduct tests or furnish inspection services for types of work for which the engineer, employee, or agent is qualified.~~

~~1305.17051704 SECTION 17051704, REQUIRED VERIFICATION AND INSPECTION SPECIAL INSPECTIONS.~~

Subpart 1. ~~Repealed, 31 SR 1165~~

Subp. 2. ~~Table 1705.34.4.~~ IBC Table 1705.34.4 is amended as follows:

A. Add "X<sup>cb</sup>" to the "Periodic" column, row "76. Inspection of concrete and shotcrete placement for proper application techniques."

B. Add footnote "cb." to read as follows:

cb. Exception: Periodic verification and inspection is permitted, upon approval of Inspection ~~can be periodic when acceptable to the structural engineer of record and the building official.~~

Subp. 3. ~~Repealed, 31 SR 1165~~

Subp. 4. ~~Table 1704.5.1.~~ IBC Table 1704.5.1, is amended as follows:

A. ~~Add "X<sup>b</sup>" to the "Periodically during task listed" column, row "4. Grout placement shall be verified to ensure compliance with code and construction document provisions."~~

B. ~~Add footnote "b." to read as follows:~~

b. ~~Exception: Inspection can be periodic when acceptable to the structural engineer of record and the building official.~~

Subp. 4. **Section 1705.4 Masonry construction.** Add the following sentence to the end of the section:

"Periodic verification and inspection of grout placement is permitted, upon approval of the structural engineer of record and the building official."



**1305.1750 [Repealed, 19 SR 1340]**

**1305.1775 [Repealed, 19 SR 1340]**

**1305.1790 [Repealed, 15 SR 74]**

**1305.1795 [Repealed, 19 SR 1340]**

**1305.1800 [Repealed, 19 SR 1340]**

**1305.1805 SECTION 1805, FOOTINGS AND FOUNDATIONS.**

Subpart 1. **Repealed, 31 SR 1165**

Subp. 2. **Repealed, 31 SR 1165**

Subp. 3. **Repealed, 31 SR 1165**

Subp. 4. **IBC Section 1805.2. [Repealed, ]** ~~IBC Section 1805.2 is amended to read as follows:~~

~~**1805.2 Depth of footings.** The minimum depth of footings below the undisturbed ground surface shall be in accordance with Minnesota Rules, part 1303.1600. Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3.~~

Subp. 5. **IBC Section 1809.5.2.1.** IBC Section 1809.5.2.1 is amended to read as follows:

**1809.5.2.1 Frost protection.** Except where otherwise protected from frost, foundations walls, piers, and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line specified ~~The minimum allowable footing depth shall be in accordance with Minnesota Rules, part 1303.1600;~~

2. Constructing in accordance with ASCE 32; or

3. Erecting on solid rock.

**Exception:** Freestanding buildings meeting all of the following conditions shall not be required to be protected:

1. Constructing in accordance with chapter 1303. ~~Classified in Occupancy Category I in accordance with Section 1604.5;~~

2. ~~Area of 600 square feet (56 m<sup>2</sup>) or less for light frame construction or 400 square feet (37 m<sup>2</sup>) or less for other than light frame; and~~

3. ~~Eave height of 10 feet (3,048 mm) or less.~~

Shallow foundations Footings shall not bear on frozen soil. ~~unless such frozen condition is of a permanent character.~~

1305.1806 [Repealed, 31 SR 1165]

~~1305.1807~~ 1305.1805 SECTION ~~1807~~ 1805, DAMPPROOFING AND WATERPROOFING.

IBC Section ~~1807.4.3~~ 1805.4.3 is amended to read as follows:

**~~1807.4.3~~ 1805.4.3 Drain discharge.** The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into a trapped area drain, sump, dry well, or other approved location above the ground.

1305.1900 [Repealed, 19 SR 1340]

1305.1907 [Repealed, ]SECTION ~~1907~~, DETAILS OF REINFORCEMENT.

IBC Section ~~1907.7.5~~ is amended to read as follows:

~~**1907.7.5 Corrosive environments.**—In corrosive environments or other severe exposure conditions, the amount of concrete protection shall be suitably increased, and denseness and nonporosity of protecting concrete shall be considered, or other protection shall be provided. In corrosive environments of parking garages and parking ramps, industrial buildings, or similar environments, a minimum concrete cover of reinforcement steel must be two inches (50.8 mm) for top surfaces and three quarter inch (19.05 mm) for bottom surfaces. All bonded reinforcement steel located within the depth of the slab must be epoxy coated in conformance with the applicable standards referenced in ACI 318 Sections 3.5.3.7 and 3.5.3.8.~~

1305.1918 [Repealed, 27 SR 1474]

1305.1928 [Repealed, 27 SR 1474]

1305.2000 [Repealed, 19 SR 1340]

1305.2050 [Repealed, 19 SR 1340]

1305.2100 [Repealed, 15 SR 74]

1305.2109 [Repealed, ]SECTION ~~2109~~, EMPIRICAL DESIGN OF MASONRY.

IBC Table ~~2109.4.1~~ is amended to read as follows:

TABLE 2109.4.1  
WALL LATERAL SUPPORT REQUIREMENTS

|              |  |
|--------------|--|
| Construction | Maximum Wall<br>Length to<br>Thickness or Wall<br>Height to<br>Thickness |
|--------------|--|

**Bearing walls**

|                                 |    |
|---------------------------------|----|
| Solid units or fully<br>grouted | 20 |
| All others                      | 18 |

**Nonbearing walls**

|          |    |
|----------|----|
| Exterior | 18 |
| Interior | 28 |

**1305.2200 [Repealed, 19 SR 1340]**

**1305.2300 [Repealed, 19 SR 1340]**

**1305.2304 [Repealed, 31 SR 1165]**

**1305.2308 SECTION 2308, CONVENTIONAL LIGHT FRAME CONSTRUCTION.**

Subpart 1. **IBC Figure 2308.9.3.** The table to IBC Figure 2308.9.3, Basic Components of the Lateral Bracing System, is amended to read as follows:

| Wind Speed | Maximum<br>Wall Spacing<br>(Feet) | Required<br>Bracketing<br>Length <sup>b</sup>    |
|------------|-----------------------------------|--|
| 90 mph     | 35'0"                             | Table<br>2308.9.3.(1)<br>and Section<br>2308.9.3 |

(IBC Figure 2308.9.3 is changed to reflect amendments in table.)

Subp. 2. **IBC Table 2308.9.3(1).** IBC Table 2308.9.3(1), Braced Wall Panels, is amended to read as follows:

TABLE 2308.9.3(1)  
BRACED WALL PANELS<sup>a</sup>

| Wind<br>Speed | Condition | Construction Methods <sup>b,c</sup> |   |   |   |   |   |   |   | Braced Panel Location<br>and Length <sup>d</sup> |
|---------------|-----------|-------------------------------------|---|---|---|---|---|---|---|--|
|               |           | 1                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |

|        |   |   |   |   |   |                |   |   |
|--------|---|---|---|---|---|----------------|---|---|
|        | One story, top of two or three story                    | X | X | X | X | X              | X | X |
| 90 mph | First story of two story or second story of three story | X | X | X | X | X              | X | X |
|        | First story of three story                              |   | X | X | X | X <sup>e</sup> | X | X |

Located in accordance with section 2308.9.3 and not more than 25 feet on center

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

<sup>a</sup>This table specifies minimum requirements for braced panels that form interior or exterior braced wall lines.

<sup>b</sup>See Section 2308.9.3 for full description.

<sup>c</sup>See Sections 2308.9.3.1 and 2308.9.3.2 for alternative braced panel requirements.

<sup>d</sup>Building length is the dimension parallel to the braced wall length.

<sup>e</sup>Gypsum wallboard applied to framing supports that are spaced at 16 inches on center.

1305.2320 [Repealed, 27 SR 1474]

1305.2326 [Renumbered 1305.2320]

1305.2400 [Repealed, 15 SR 74]

1305.2500 [Repealed, 19 SR 1340]

## **1305.2510 SECTION 2510 LATHING AND FURRING FOR CEMENT PLASTER (STUCCO)**

### **IBC Section 2510.6 is amended as follows:**

**2510.6 Water-resistive barriers.** *Water-resistive barriers* shall be installed as required in Section 1404.2 and, where applied over wood-based sheathing, shall include a water resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. ~~The individual layers shall be installed independently such that each layer provides a separate continuous plane and any flashing (installed in accordance with Section 1405.4) intended to drain to the water-resistive barrier is directed between the layers.~~

Exception: where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal or greater than that of 60-minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or drainage space.

1305.2600 [Repealed, 19 SR 1340]

## **1305.2603 SECTION 2603 FOAM PLASTIC INSULATION.**

IBC Section 2603.4.1.13 is amended to read as follows:

**2603.4.1.13 Type V construction.** Foam plastic spray applied to a sill plate and header of Type V construction is subject to all of the following:

1. The maximum thickness of the foam plastic shall be 5 1/2 inches (82.6 mm).
2. The foam plastic shall have a flame spread index of 25 or less and an accompanying smoke developed index of 450 or less when tested in accordance with ASTM E84.

**IBC Section 2603.5.5 is revised by adding exception number two and renumbering the exceptions as follows:**

**IBC Section 2603.5.5 Vertical and lateral fire propagation.** The exterior wall assembly shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

**Exceptions:**

1. One-story buildings complying with Section 2603.4.1.4.  
2. In other than high rise buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, foam plastic insulation may be installed in compliance with the following conditions:

- a) The foam plastic insulation shall be applied between a continuous masonry or non-combustible exterior wall sheathing on the building side and a continuous non-combustible substrate or fire resistant treated plywood barrier on the exterior side of the foam plastic insulation.
- b) Foam insulation shall be limited to a maximum of 3" thickness.
- c) Wall claddings permitted by this code may be applied to the outside of the exterior substrate barrier.
- d) Continuous fire blocking shall be provided around all opening head, jamb and sill conditions between continuous masonry or non-combustible exterior wall sheathing on the building side and a continuous substrate barrier on the exterior side of the foam plastic insulation.
- e) Continuous horizontal metal furring, minimum 16 gauge without perforations, shall be provided at each floor, in line with the slab edge containment fire stopping creating a fire break spanning between the masonry or non-combustible wall sheathing on the building side and a non-combustible substrate barrier on the exterior side of the foam plastic insulation.

**1305.2700 [Repealed, 19 SR 1340]**

**1305.2702 SECTION 2702, EMERGENCY AND STANDBY POWER SYSTEMS.**

IBC Section 2702.1 is amended to read as follows:

**2702.1 Installation.** Emergency and standby power systems shall be installed in accordance with Minnesota Rules, chapter 1315.

**1305.2800 [Repealed, 19 SR 1340]**

**1305.2900 [Repealed, 19 SR 1340]**

**1305.2902 SECTION 2902, MINIMUM PLUMBING FACILITIES.**

Subpart 1. **Section 2902.1.** IBC Section 2902.1 is amended to read as follows:

**2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

**Exception:** When approved by the building official, buildings or structures that are normally unoccupied, such as picnic shelters, amphitheaters, small transit stop stations, cold storage buildings, utility sheds, warming houses, kiosks, concession stands and similar structures, need not be provided with restroom facilities.

Subp. 1a. **Section 2902.1.2.** IBC Section 2902.1.2 is amended to read as follows:

**2902.1.2 Family or assisted-use toilet and bath fixtures.** Fixtures located within family or assisted-use toilet and bathing rooms complying with Minnesota Rules, chapter 1341, are permitted to be included in determining the minimum required number of fixtures for either the male or female occupants.

Subp. 2. **Table 2902.1.**

A. The body of IBC Table 2902.1 is amended as follows:

1. Add footnote "h" to the A 5 Use Group "Stadiums, amusement parks, bleachers, and grandstands for outdoor sporting events and activities" description of the table.
2. Add footnotes "i," "j," and "k" to the "Drinking Fountains" heading in the table.
3. Add footnote "k" to the "Water Closets" heading in the table.

B. The footnotes to IBC Table 2902.1 are amended, and footnotes added, to read as follows:

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

h. Permanent facilities located either on site or available in an adjacent building or portable temporary facilities available on site during times when the stadium or grandstand is in use may be used.

f. A drinking fountain shall not be required for an occupant load less than 50.

i. Where water is served in restaurants, drinking fountains shall not be required.

j. Water or other beverages available through free or fee based serving or dispensers may be substituted for up to 50 percent of the required number of drinking fountains.

k. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets.

Subp. 3. **Section 2902.2.** IBC Section 2902.2 is amended to read as follows:

**2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 45 or less.

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.

~~4. Separate facilities shall not be required in Group B occupancies not exceeding 2,000 gross square feet (185.8 m<sup>2</sup>) of floor area. When using this exception, the individual family or assisted-use toilet facility shall have not less than one water closet, one urinal, and one lavatory.~~

Subp. 4. **Section 2902.** IBC Section 2902 is amended by adding a subsection to read as follows:

**2902.6 Controlled access to required facilities.** Sanitation facilities required by this chapter may have controlled access, but in all cases shall be maintained available for utilization by those employees, customers, or patrons used to calculate the minimum required facilities.

**1305.3000 [Repealed, 15 SR 74]**

**1305.3001 [Repealed, 27 SR 1474]**

**1305.3030 CHAPTER 30, ELEVATORS AND CONVEYING SYSTEMS.**

IBC Chapter 30 is deleted and replaced with the following:

**CHAPTER 30**

**ELEVATORS AND CONVEYING SYSTEMS**

The design, construction, installation, operation, alteration, and repair of elevators and related devices shall be in accordance with Minnesota Rules, chapter 1307. Refer to Minnesota Rules, chapter 1307, the Minnesota Elevator Code, for the complete application of IBC Chapter 30.

**1305.3100 [Repealed, 15 SR 74]**

**1305.3109 SECTION 3109, SWIMMING POOL ENCLOSURES.**

IBC Section 3109 Swimming Pool Enclosures and Safety Devices is deleted in its entirety.

**1305.3112 SECTION 3112, WINDOW CLEANING BUILDING ANCHORS**

IBC Chapter 31 is amended by adding a new section as follows:

**1305.3112 WINDOW CLEANING BUILDING ANCHORS**

IBC Chapter 31 is amended by adding a new section

**IBC Sec. 3112.1 General.** Building anchors for window cleaning safety shall be provided for buildings four or more *stories above grade plane*. Building anchors for window cleaning safety shall be designed, installed and located in accordance with the design criteria of ASI/IWCA I-14.1-2001.

**Exceptions:**

1. Buildings without windows.
2. Existing buildings undergoing reconstruction, alteration or repair that does not include the exposure of primary structural roof components.
3. The commissioner of the Minnesota Department of Labor and Industry may waive all or a portion of the requirements for existing buildings if the installation of the dedicated anchorages would not result in significant safety improvements due to limits on the size of the project, or other factors as determined by the commissioner.



**1305.3200 [Repealed, 15 SR 74]**

**1305.3300 [Repealed, 15 SR 74]**

**1305.3302 SECTION 3302, CONSTRUCTION SAFEGUARDS.**

IBC Section 3302 is amended by adding a subsection to read as follows:

**3302.4 Construction barriers.** Where construction, remodeling, or demolition is taking place involving the use of cutting and welding, temporary heating with open flames, or flammable liquid fueled equipment, such areas shall be separated from occupied areas of a building by materials that will resist the spread of fire and smoke as specified for draftstopping materials in Section 718.3.1.

**1305.3305 SECTION 3305, SANITARY.**

IBC Section 3305 is deleted.

**1305.3400 [Repealed, 19 SR 1340]**

**1305.3401 CHAPTER 34, EXISTING STRUCTURES.**

IBC Chapter 34 is deleted and replaced with the following:

**CHAPTER 34**

**EXISTING STRUCTURES**

The standards for a change of occupancy, alteration, and repair of existing buildings and structures with historical significance, shall be in accordance with Minnesota Rules, chapter 1311. Refer to Minnesota Rules, chapter 1311, the Minnesota Building Conservation Code, for the complete application of provisions for existing structures.

**1305.3500 CHAPTER 35, REFERENCED STANDARDS.**

IBC Chapter 35 is amended by modifying a referenced standard and adding a new reference standard as follows:

**NFPA 45 2011 Standard on Fire Protection for Laboratories Using Chemicals**

**ANSI/IWCA I-14.1-2001 STANDARD FOR WINDOW CLEANING**

**1305.3600 [Repealed, 15 SR 74]**

1305.3700 [Repealed, 15 SR 74]  
1305.3800 [Repealed, 19 SR 1340]  
1305.3850 [Repealed, 11 SR 1405]  
1305.3860 [Repealed, 19 SR 1340]  
1305.3900 [Repealed, 19 SR 1340]  
1305.3970 [Repealed, 11 SR 1405]  
1305.4000 [Repealed by amendment, 9 SR 1557]  
1305.4100 [Repealed, 19 SR 1340]  
1305.4200 [Repealed, 15 SR 74]  
1305.4300 [Repealed, 11 SR 1405]  
1305.4313 [Repealed, 27 SR 1474]  
1305.4332 [Repealed, 27 SR 1474]  
1305.4415 [Repealed, 27 SR 1474]  
1305.4416 [Repealed, 27 SR 1474]  
1305.4429 [Repealed, 27 SR 1474]  
1305.4500 [Repealed, 15 SR 74]  
1305.4600 [Repealed, 19 SR 1340]  
1305.4700 [Repealed, 19 SR 1340]  
1305.4800 [Repealed, 19 SR 1340]  
1305.4850 [Repealed, 19 SR 1340]  
1305.4900 [Repealed, 15 SR 74]  
1305.5000 [Repealed, 11 SR 1405]  
1305.5100 [Repealed, 11 SR 1405; 19 SR 1340]  
1305.5101 [Renumbered 1307.0010]

1305.5102 [Renumbered 1307.0015]

1305.5103 [Renumbered 1307.0020]

1305.5104 [Renumbered 1307.0025]

1305.5105 [Renumbered 1307.0030]

1305.5106 [Renumbered 1307.0035]

1305.5107 [Renumbered 1307.0040]

1305.5108 [Renumbered 1307.0045]

1305.5109 [Renumbered 1307.0050]

1305.5110 [Renumbered 1307.0055]

1305.5111 [Renumbered 1307.0060]

1305.5112 [Renumbered 1307.0065]

1305.5114 [Renumbered 1307.0070]

1305.5115 [Renumbered 1307.0075]

1305.5116 [Renumbered 1307.0080]

1305.5117 [Renumbered 1307.0085]

1305.5118 [Renumbered 1307.0090]

1305.5200 [Repealed, 19 SR 1340]

1305.5300 [Repealed, 15 SR 74]

1305.5310 [Repealed, 15 SR 74]

1305.5320 [Repealed, 19 SR 1340]

1305.5340 [Repealed, 19 SR 1340]

1305.5360 [Repealed, 19 SR 1340]

1305.5380 [Repealed, 19 SR 1340]

1305.5385 [Repealed, 19 SR 1340]

1305.5400 [Repealed, 19 SR 1340]  
1305.5500 [Repealed, 15 SR 74]  
1305.5700 [Repealed, 19 SR 1340]  
1305.5710 [Repealed, 19 SR 1340]  
1305.5720 [Repealed, 19 SR 1340]  
1305.5730 [Repealed, 19 SR 1340]  
1305.5740 [Repealed, 19 SR 1340]  
1305.5750 [Repealed, 19 SR 1340]  
1305.5800 [Repealed, 15 SR 74]  
1305.5900 [Repealed, 19 SR 1340]  
1305.5910 [Repealed, 11 SR 1405]  
1305.6000 [Repealed, 19 SR 1340]  
1305.6200 [Repealed, 19 SR 1340]  
1305.6250 [Repealed, 19 SR 1340]  
1305.6260 [Repealed, 11 SR 1405]  
1305.6270 [Repealed, 11 SR 1405]  
1305.6280 [Repealed, 19 SR 1340]  
1305.6300 [Repealed, 19 SR 1340]  
1305.6400 [Repealed by amendment, 9 SR 1557]  
1305.6425 [Repealed, 19 SR 1340]  
1305.6430 [Repealed, 19 SR 1340]  
1305.6500 [Repealed by amendment, 9 SR 1557]  
1305.6525 [Repealed, 19 SR 1340]  
1305.6550 [Repealed, 15 SR 74]

**1305.6600 [Repealed, 15 SR 74]**

**1305.6700 [Repealed, 19 SR 1340]**

**1305.6800 [Repealed, 19 SR 1340]**

**1305.6900 [Repealed, 15 SR 74]**

**1305.6901 [Repealed, 19 SR 1340]**

**1305.6902 [Repealed, 19 SR 1340]**

**1305.6905 [Repealed, 19 SR 1340]**

**1305.6910 [Repealed, 19 SR 1340]**

**1305.6920 [Repealed, 19 SR 1340]**

**1305.7000 [Repealed, 27 SR 1474]**

**1305.7100 [Repealed, 27 SR 1474]**

**Minn. Rules repealed, etc. in chapter 1305**

**1305.0010 [Repealed, 27 SR 1474]**

**1305.0020 [Repealed, 27 SR 1474]**

**1305.0100 [Repealed, 19 SR 1340]**

**1305.0102 [Repealed, 27 SR 1474]**

**1305.0103 [Repealed, 27 SR 1474]**

**1305.0105 [Repealed, 27 SR 1474]**

**1305.0106 [Repealed, 27 SR 1474]**

**1305.0107 [Repealed, 27 SR 1474]**

**1305.0108 [Repealed, 27 SR 1474]**

**1305.0109 [Repealed, 27 SR 1474]**

**1305.0150 [Repealed, 19 SR 1340]**

**1305.0200 [Repealed, 19 SR 1340]**

1305.0300 [Repealed, 15 SR 74]  
1305.0301 [Repealed, 27 SR 1474]  
1305.0305 [Repealed, 27 SR 1474]  
1305.0308 [Repealed, 27 SR 1474]  
1305.0400 [Repealed, 19 SR 1340]  
1305.0405 [Repealed, 27 SR 1474]  
1305.0500 [Repealed, 19 SR 1340]  
1305.0600 [Repealed, 19 SR 1340]  
1305.0700 [Repealed, 19 SR 1340]  
1305.0800 [Repealed, 19 SR 1340]  
1305.0900 [Repealed, 19 SR 1340]  
1305.0904 [Repealed, 27 SR 1474]  
1305.1000 [Repealed, 19 SR 1340]  
1305.1000 [Repealed, 27 SR 1474]  
1305.1004 [Renumbered 1305.1000, subpart 1]  
1305.1009 [Renumbered 1305.1000, subps 3 and 4]  
1305.1019 [Renumbered 1305.1000, subp 5]  
1305.1100 [Repealed, 19 SR 1340]  
1305.1200 [Repealed, 19 SR 1340]  
1305.1300 [Repealed, 19 SR 1340]  
1305.1350 [Repealed, 19 SR 1340]  
1305.1355 [Repealed, 11 SR 1405]  
1305.1370 [Repealed, 19 SR 1340]  
1305.1400 [Repealed, 19 SR 1340]  
1305.1500 [Repealed, 19 SR 1340]  
1305.1506 [Repealed, 27 SR 1474]

1305.1590 [Repealed, 19 SR 1340]  
1305.1600 [Repealed, 19 SR 1340]  
1305.1614 [Renumbered 1305.1616]  
1305.1616 [Renumbered 1305.1618]  
1305.1616 [Repealed, 27 SR 1474]  
1305.1618 [Repealed, 27 SR 1474]  
1305.1623 [Renumbered 1305.1625]  
1305.1625 [Repealed, 27 SR 1474]  
1305.1700 [Repealed, 19 SR 1340]  
1305.1701 [Repealed, 27 SR 1474]  
1305.1750 [Repealed, 19 SR 1340]  
1305.1775 [Repealed, 19 SR 1340]  
1305.1790 [Repealed, 15 SR 74]  
1305.1795 [Repealed, 19 SR 1340]  
1305.1800 [Repealed, 19 SR 1340]  
1305.1900 [Repealed, 19 SR 1340]  
1305.1918 [Repealed, 27 SR 1474]  
1305.1928 [Repealed, 27 SR 1474]  
1305.2000 [Repealed, 19 SR 1340]  
1305.2050 [Repealed, 19 SR 1340]  
1305.2100 [Repealed, 15 SR 74]  
1305.2200 [Repealed, 19 SR 1340]  
1305.2300 [Repealed, 19 SR 1340]  
1305.2320 [Repealed, 27 SR 1474]

1305.2326 [Renumbered 1305.2320]  
1305.2400 [Repealed, 15 SR 74]  
1305.2500 [Repealed, 19 SR 1340]  
1305.2600 [Repealed, 19 SR 1340]  
1305.2700 [Repealed, 19 SR 1340]  
1305.2800 [Repealed, 19 SR 1340]  
1305.2900 [Repealed, 19 SR 1340]  
1305.3000 [Repealed, 15 SR 74]  
1305.3001 [Repealed, 27 SR 1474]  
1305.3100 [Repealed, 15 SR 74]  
1305.3200 [Repealed, 15 SR 74]  
1305.3300 [Repealed, 15 SR 74]  
1305.3400 [Repealed, 19 SR 1340]  
1305.3500 [Repealed, 11 SR 1405]  
1305.3600 [Repealed, 15 SR 74]  
1305.3700 [Repealed, 15 SR 74]  
1305.3800 [Repealed, 19 SR 1340]  
1305.3850 [Repealed, 11 SR 1405]  
1305.3860 [Repealed, 19 SR 1340]  
1305.3900 [Repealed, 19 SR 1340]  
1305.3970 [Repealed, 11 SR 1405]  
1305.4000 [Repealed by amendment, 9 SR 1557]  
1305.4100 [Repealed, 19 SR 1340]  
1305.4200 [Repealed, 15 SR 74]  
1305.4300 [Repealed, 11 SR 1405]



1305.4313 [Repealed, 27 SR 1474]  
1305.4332 [Repealed, 27 SR 1474]  
1305.4415 [Repealed, 27 SR 1474]  
1305.4416 [Repealed, 27 SR 1474]  
1305.4429 [Repealed, 27 SR 1474]  
1305.4500 [Repealed, 15 SR 74]  
1305.4600 [Repealed, 19 SR 1340]  
1305.4700 [Repealed, 19 SR 1340]  
1305.4800 [Repealed, 19 SR 1340]  
1305.4850 [Repealed, 19 SR 1340]  
1305.4900 [Repealed, 15 SR 74]  
1305.5000 [Repealed, 11 SR 1405]  
1305.5100 [Repealed, 11 SR 1405; 19 SR 1340]  
1305.5101 [Renumbered 1307.0010]  
1305.5102 [Renumbered 1307.0015]  
1305.5103 [Renumbered 1307.0020]  
1305.5104 [Renumbered 1307.0025]  
1305.5105 [Renumbered 1307.0030]  
1305.5106 [Renumbered 1307.0035]  
1305.5107 [Renumbered 1307.0040]  
1305.5108 [Renumbered 1307.0045]  
1305.5109 [Renumbered 1307.0050]  
1305.5110 [Renumbered 1307.0055]  
1305.5111 [Renumbered 1307.0060]

1305.5112 [Renumbered 1307.0065]  
1305.5114 [Renumbered 1307.0070]  
1305.5115 [Renumbered 1307.0075]  
1305.5116 [Renumbered 1307.0080]  
1305.5117 [Renumbered 1307.0085]  
1305.5118 [Renumbered 1307.0090]  
1305.5200 [Repealed, 19 SR 1340]  
1305.5300 [Repealed, 15 SR 74]  
1305.5310 [Repealed, 15 SR 74]  
1305.5320 [Repealed, 19 SR 1340]  
1305.5340 [Repealed, 19 SR 1340]  
1305.5360 [Repealed, 19 SR 1340]  
1305.5380 [Repealed, 19 SR 1340]  
1305.5385 [Repealed, 19 SR 1340]  
1305.5400 [Repealed, 19 SR 1340]  
1305.5500 [Repealed, 15 SR 74]  
1305.5700 [Repealed, 19 SR 1340]  
1305.5710 [Repealed, 19 SR 1340]  
1305.5720 [Repealed, 19 SR 1340]  
1305.5730 [Repealed, 19 SR 1340]  
1305.5740 [Repealed, 19 SR 1340]  
1305.5750 [Repealed, 19 SR 1340]  
1305.5800 [Repealed, 15 SR 74]  
1305.5900 [Repealed, 19 SR 1340]

1305.5910 [Repealed, 11 SR 1405]  
1305.6000 [Repealed, 19 SR 1340]  
1305.6200 [Repealed, 19 SR 1340]  
1305.6250 [Repealed, 19 SR 1340]  
1305.6260 [Repealed, 11 SR 1405]  
1305.6270 [Repealed, 11 SR 1405]  
1305.6280 [Repealed, 19 SR 1340]  
1305.6300 [Repealed, 19 SR 1340]  
1305.6400 [Repealed by amendment, 9 SR 1557]  
1305.6425 [Repealed, 19 SR 1340]  
1305.6430 [Repealed, 19 SR 1340]  
1305.6500 [Repealed by amendment, 9 SR 1557]  
1305.6525 [Repealed, 19 SR 1340]  
1305.6550 [Repealed, 15 SR 74]  
1305.6600 [Repealed, 15 SR 74]  
1305.6700 [Repealed, 19 SR 1340]  
1305.6800 [Repealed, 19 SR 1340]  
1305.6900 [Repealed, 15 SR 74]  
1305.6901 [Repealed, 19 SR 1340]  
1305.6902 [Repealed, 19 SR 1340]  
1305.6905 [Repealed, 19 SR 1340]  
1305.6910 [Repealed, 19 SR 1340]  
1305.6920 [Repealed, 19 SR 1340]  
1305.7000 [Repealed, 27 SR 1474]

1305.7100 [Repealed, 27 SR 1474]